

## **SUPPORT FOR AMENDMENTS**

### **In drawings**

Figure 1 has been amended to show the thrust bearing, reference item 32. Support for this amendment may be found in original Figure 9, which showed the thrust bearing between the upper mandrel and the rotating sleeve as reference item 28. Item 28 is now the magnet and a new reference number must be used. No new material has been added by this amendment and reference item 32 is now properly used in the amended specification.

Figures 2 and 3 have been amended by correcting items "11A" to - - 11B - -, as required by the Examiner. No new material has been added by this amendment.

### **In the original specification**

All the changes, with the exception of changing the reference from Figure 9, item 28, to Figure 1, item 32, made in the specification are made to meet the Examiner's objections to the specification or the amendment as set forth above. The change in Figure reference and item number were necessitated because Figure 9 was modified in an earlier (accepted amendment). No new material is added by the amendments to the specification.

### **In the Claims**

Claim 1 has been amended to incorporate the language of claim 5, which claims BIT POINT as described in the specification (eccentric/concentric sleeves). Claim 3 has been amended to incorporate the language of claim 6, which claims BIT PUSH as described in the specification (eccentric/eccentric sleeves). Thus, claims 1 and 3 have been amended to be independent claims and to meet the Examiner's rejections and incorporate the language of the intervening claims. These two claims now form the base claims claiming the improvement.

Claim 7 now depends from 1 and claim 8 now depends from 3. These claims were considered to be allowable if the structure were modified to incorporate the language of old claims 5 and 6.

The Examiner objected to claim 21, but would allow it if the proper language were incorporated. Claim 21 originally depended from claim 1 (rejected). However, claim 1 has been

amended to properly claim the allowed invention. Thus, claim 21 is a dependent claim following BIT POINT.

Claim 22 has been amended. This claim mirrors claim 21 (allowed if properly re-written) but depends from BIT PUSH.

Claim 47 was rejected in the second office action; however, claim 48 and 49 were allowed if properly rewritten. Claim 47 now depends from claim 1, which has been amended to include the language of claim 5 (as required by the Examiner). Thus, claims 48 and 49 are now dependent from 47 which, in turn, depends from amended claim 1, that now incorporates the language of old claim 5. Thus claims 47 – 49 are dependent claims based on BIT POINT.

A mirror set of claims (like those of 47 – 49) is now required to describe dependencies for BIT PUSH. Therefore claims 51 – 53 have been amended to mirror the objected claims 47 – 49 and depend from claim 3 (BIT PUSH).

Claim 3 was amended, over claim 17 – an independent claim, to better keep and establish the order of independent and dependant claims in the application. Thus the total number of independent claims remains the same and no additional fees are due.

## **REQUEST FOR RECONSIDERATION OF OBJECTIONS**

It is believed that the proposed corrections to the drawings and to the specification traverse the objections of the Examiner. Reconsideration of the Examiner's objections is respectfully requested.

It is believed that the claim structure and the amendments to the claims now traverse the Examiner's objections.

### **ALLOWABLE SUBJECT MATTER**

The Examiner allowed that claims 5-8, 21 and 48-49 were objected to as being dependant upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The amendments offered earlier in this response correct the problems and add language to the base claims. It is believed that these claims are now allowable.

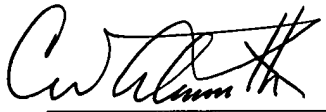
## GENERAL REMARKS

The above amendments to the drawings, the specification and the claims add NO new material. Support for the amendment may be found in the specification, drawings and claims as originally filed.

Applicants believe that they have properly traversed the rejections and objections of the Examiner and that they have presented a proper and respectful request for reconsideration of the rejected claims. Acceptance and entry of the amendments is respectfully requested.

Applicants now believe that the application is in condition for allowance and such is respectfully requested. The fee for Continuing Examination is enclosed as is the fee for a one month extension of time.

Respectfully submitted



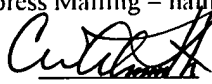
C. W. Alworth, Registration Number 33,824  
Alworth Law and Engineering  
Customer Number 027645  
505 Cumberland Road  
Tyler, Texas 75703-9324  
903/534-0477 (Vox) 903/581-1441 (Fax)  
calworth@calworth.com (Internet)  
Attorneys for Applicants

### Attachments

- Updated Reference/Item Number Listing
- Required Drawings – Figures 1, 2 and 3
- Petition for One Month Extension
- Assignee's Check in payment of the Request for Continued Examination Fee and Petition Fee

### CERTIFICATE OF EXPRESS MAILING UNDER 37 CFR 1.10(a)

I, C. W. Alworth, hereby certify that this Response to the First Office action in the above identified patent application, and the attachments, was properly placed (prepaid) in the Express Mail Service of the United States Postal Service – receipt number EV 405149849 US - on the 25<sup>th</sup> day of May, 2004. Under the Rules of the Office, the Commissioner is hereby requested to assign the date of filing as the date of Express Mailing – namely 25 May 2004.

  
C. W. Alworth

# **ATTACHMENTS**

**Amended Drawings  
For Approval  
and  
Revised Item Listing**



### Reference/Item Number Listing

Provided as an aid to Examination and not as part of the application

- 1
- 2 Wellbore
- 2a Low Side
- 3 Adapter Sub
- 4 Drill String/Adapter Sub
- 5 Lines of Flux
- 6 Instrumentation and Battery Subassemblies
- 7 Drill Bit
- 8 Drill Collars
- 9 Drill String
- 10 In general the Instant Device
- 11a Center Mandrel |
- 11b Upper Mandrel| all join together see ¶5 of page 13 of the original PCT application
- 11c Lower Mandrel |
- 12 Inner Sleeve
- 12a Upper Inner Sleeve Portion - Eccentric
- 12b Lower Inner Sleeve Portion - Concentric
- 12c Upper Inner Sleeve Portion - Concentric
- 12d Lower Inner Sleeve Portion - Eccentric
- 13 Outer Housing – Pregnant Housing – Outer (Eccentric) Sleeve
- 14 Secondary Shoes
- 15 Fluid Bypass Outer Housing
- 16 Fluid Bypass Inner Sleeve
- 17 Fluid Bypass, Mandrel
- 18 Fluid Interface Between Inner Sleeve and Outer Housing
- 19 Fluid Interface Between Mandrel and Inner Sleeve
- 20 Weighted or Pregnant Portion of the Outer Housing
- 21 Stabilizer Shoe
- 22 String Stabilizer placed away from the instant device
- 23 String Stabilizer placed close to the instant device
- 24 Near-bit Stabilizer
- 25 Pinion Gear
- 26 Ring Gear
- 27 Outer Housing Cavity
- 28 Magnet
- 29 Surveying Tools
- 30 Crossover sub
- 31 Linear Actuator
- 32 Thrust Bearing
- 33 Linear Actuator
- 34
- 35 Linear Actuator
- 36
- 37 Sensor